Amateur Computer Group of New Jersey NEWS

ACGNJ Announcements

Main Meeting

Friday, December 5, 2014, 8:00 PM to 10:00 PM.
Scheduled: Elections and ***Holiday Party!***
(Bob Hawes will show videos and serve refreshments).

Window Pains Meeting

Friday, December 19, 2014, 8:00 PM to 10:00 PM.
Scheduled Topic: Programming Language Shootout.
Scheduled Speaker: Bruce Arnold.

Elections Are Here!

This month's Main Meeting (Friday, December 5, 8:00 PM) is also our Annual Business Meeting and Elections. This year's candidates:

President: Michael Redlich
Vice-President: Wendy Bell
Secretary: Brenda Bell
Treasurer: Malthi Masurekar
Directors (Two year term, through 2016):
Bob Hawes
David McRitchie
Michael Reagan
Paul Syers

Nominations will be accepted from the floor up until the election. So let's get out and vote. More than anything else, our club needs ***YOU!***

http://www.acgnj.org
Founded 1975

This newsletter was made by *100% pure* Linux!
Operating System: Ubuntu 12.04 LTS
Desktop Publisher: Scribus 1.3.3.13
Word Processor: LibreOffice Writer 3.3.4

ACGNJ Meetings

For the very latest news on ACGNJ meetings, please visit the ACGNJ Website (*www.acgnj.org*).

For news from OTHER clubs, please go to:
http://www.acgnj.org/joomla/

Lunics (Linux/UNIX): Monday, December 1, 8 PM
Andreas Meyer (lunics (at) acgnj.org)

Board of Directors Meeting: ~~Tues, Dec 2, 7 PM~~
MOVED due to President's scheduling conflict:

Board of Directors Meeting: Fri, Dec 5, **7** PM
Mike Redlich (president (at) acgnj.org)

Main Meeting: Friday, December 5. 8:00 PM
Mike Redlich (president (at) acgnj.org)

Layman's Forum: Monday, December 8, 8:00 PM
Matt Skoda (som359 (at) gmail.com)

Java: Tuesday, December 9, 7:30 PM
Mike Redlich (mike (at) redlich.net)

Mobile Devices: Wednesday, December 10, 7:30 PM
Brenda Bell (mobdevsig (at) acgnj.org)

Investing: Thursday, December 11, 8:00 PM
Jim Cooper (jim (at) thecoopers.org).

NJ Gamers: Friday, December 12, **6**:00 PM
Gregg McCarthy (greggmajestic (at) gmail.com)

Computer Workshop: Saturday, Dec. 13, **1:00 PM**
Bob Hawes (cmp.wrkshp (at) acgnj.org).

Web Browser: Monday, December 15, 7:30 PM
David McRitchie (firefox (at) acgnj.org)

C/C++: Tuesday, December 16, 7:30 PM
Bruce Arnold (barnold (at) ieee.org)

Window Pains: Friday, December 19, 8:00 PM
John Raff (john (at) jraff.com)

All meetings, unless otherwise noted, are at the Scotch Plains Rescue Squad, 1916 Bartle Ave, Scotch Plains, New Jersey. Directions and map on last page. 🖥

In This Issue

Officers, Directors and Leaders

President	Mike Redlich	(908) 246-0410	Director Emeritus	Sol Libes	(609) 520-9024
Vice President	Wendy Bell		Through 2015	Gregg McCarthy	
Treasurer	Malthi Masurekar	(732) 560-1534		John Raff	(973) 533-0664
Secretary	Brenda Bell			Frank Warren	(908) 756-1681
Past President	Evan Williams	(908) 359-8070		(Open)	
			Through 2014	Bob Hawes	
Special Interest Groups				David McRitchie	
C Languages	Bruce Arnold	(908) 735-7898		Michael Reagan	
Genealogy	Frank Warren	(908) 756-1681		(Open)	
Hardware	Mike Reagan		**Standing Committees**		
Investing	Jim Cooper		APCUG Rep.	Frank Warren	(908) 756-1681
Java	Michael Redlich	(908) 246-0410	Facilities	John Raff	(973) 533-0664
Layman's Forum	Matthew Skoda	(908) 359-8842	Financial	Evan Williams	(908) 359-8070
LUNICS	Andreas Meyer		Historian	Lenny Thomas	
Mobile Devices	Brenda Bell		Membership	Bob Hawes	
NJ Gamers	Gregg McCarthy		Newsletter	Bob Hawes	
Web Browser	David McRitchie		Publicity	Gregg McCarthy	
WebDev	Evan Williams	(908) 359-8070	Trenton Computer Fest	Mike Redlich	(908) 246-0410
Window Pains	John Raff	(973) 533-0664	Vendor Liaison	Arnold Milstein	(908) 753-8036
			Webmaster	John Raff	(973) 533-0664

ACGNJ News

Editor
Robert D. Hawes
bob.hawes@acgnj.org

Editor Emeritus
(and Emergency Backup Publisher)
Barbara DeGroot
145 Gun Club Road
Palmerton PA 18071
Tel: (570) 606-3596
bdegroot@ptd.net

Submissions: Articles, reviews, cartoons, illustrations. Most common formats are acceptable. Graphics embedded in the document must also be sent as separate files. E-mail submissions to newsletter@acgnj.org preferred. **Always confirm**. Date review and include name of word processor used, your name, address and phone and name, address and phone of manufacturer, if available.

Tips for reviewers: Why does anyone need it? Why did you like it or hate it? Ease (or difficulty) of installation, learning and use. Would you pay for it?

Advertising: Non-commercial announcements from members are free. Commercial ads 15 cents per word, $5 minimum. Camera ready display ads: Full page (7 x 10 inches) $150, two-thirds page (4.5 x 10) $115, half-page $85, one-third $57, quarter $50, eighth $30. Discount 10% on 3 or more consecutive insertions. Enclose payment.

Publication Exchange: Other computer user groups are invited to send a subscription to ACGNJ at the address below. We will respond in kind.

Address Changes should be e-mailed to *membership@acgnj.org* or sent to ACGNJ at the address below.

Membership: Regular (now includes *all* family members who reside at the same address): 1 year $25, 2 years $40, 3 years $55. Student: 1 year $20. Senior Citizen (over 65): 1 year $20, 3 years $45. Send name, address and payment to ACGNJ, PO Box 135, Scotch Plains NJ 07076.

Typographic Note: This ACGNJ News was produced using Scribus 1.3.3.13. Font families used are Times New Roman (TT) for body text, Arial (TT) for headlines.

E-Mail Addresses
Here are the e-mail addresses of ACGNJ Officers, Directors and SIG Leaders (and the Newsletter Editor). This list is also at (*http://www.acgnj.org/officers.html*).

Bruce Arnold	barnold@ieee.org
Brenda Bell	mobdevsig@acgnj.org
Wendy Bell	ariellechaya@hotmail.com
Jim Cooper	jim@thecoopers.org
Barbara DeGroot	bdegroot@ptd.net
Mark Douches	pcproblems@pobox.com
David Eisen	ultradave@gmail.com
Manuel Goyenechea	Goya@acgnjdotnetsig.org
Bob Hawes	bob.hawes@acgnj.org
Sol Libes	sol@libes.com
Malthi Masurekar	masureka@umdnj.edu
Don McBride	don@mcbride.name
Gregg McCarthy	greggmc@optonline.net
David McRichie	dmcritchie@hotmail.com
Andreas Meyer	lunics@acgnj.org
Arnold Milstein	mrflark@yahoo.com
John Raff	john@jraff.com
Mike Reagan	hardware@acgnj.org
Mike Redlich	mike@redlich.net
Matt Skoda	som359@aol.com
Paul Syers	paul.syers@acgnj.org
Lenny Thomas	lennythomas@technologist.com
Scott Vincent	scottvin@optonline.net
Frank Warren	kb4cyc@webwarren.com
Evan Williams	tech@evanwilliamsconsulting.com

ACGNJ Investment Meeting SUMMARY (Nov. 13, 2014)
Philip Lees, ACGNJ

We had a very interactive meeting on Thursday, 11/13/2014 with **10** attendees, with lots of questions and related discussions.

Jim Cooper discussed a very interesting technical indicator that he has developed, provisionally called the Ultimate ADX indicator, giving an excellent interpretation of the strength *AND* direction of the current trend. Nice work, Jim.

Jim then moved onto his stocks-n-charts presentation. As usual, ticker symbols were requested/suggested and Jim progressed through technical analysis of the respective stock symbols.

Again, this generated a lot of interaction,with many questions and a lot of discussion. Everybody appears to get involved in this segment, listening to ideas and asking questions as Jim does the presentation and discusses the potential technical setup(s) for the respective stock(s).

Thanks to everybody who attended. Please attend the meetings, everybody learns from them.

We hope to see you at December's meeting, **12/11/2014**, where we will do an end-of-year meeting with cake, coffee, stocks and chat. Thank you. Philip Lees 💻

ACGNJ Mini-Reports

Main Meeting Report
Mike Redlich, ACGNJ

We had a total of 10 attendees at our Main Meeting on November 7. Scot Jenkins completed his "/usr/bin a to z: A survey of UNIX commands" lecture (begun at our Window Pains Meeting on September 19, 2014). This time, Scot covered UNIX commands in 💻e k-z range.

Window Pains Meeting Report
Brenda and Wendy Bell, ACGNJ

We had a total of 9 attendees at our Window Pains Meeting on November 21. Paul Syers presented a demo of the Rosetta Stone "Espanol" software for the Spanish (Latin America) Level 1, 2, 3, 4 & 5 Version. Paul ran through the different lessons, and covered how to interact with the software. 💻

Java Users Group Report
Mike Redlich, ACGNJ

This month's meeting (November 11, 2014) was entitled, "Technical Overview of Meteor 1.0", where we reviewed the latest features of this milestone release of the Meteor web application development tool. There were a total of five (5) attendees. 💻

Computer Workshop Report
Bob Hawes, ACGNJ

We had 3 attendees at our Saturday, November 15 meeting. (A bit of a disappointment). I spent some time working on a laptop that a guest brought in, and Mike Reagan worked on one of his salvaged computers. Neither of us was completely successful.💻

Still Too Big??? (Part 1)
Bob Hawes, ACGNJ

I thought about naming this article *Why So Big? - The Next Generation*, because it really *is* a continuation of my **ten** part "Why So Big?" saga. (See our December 2012 issue, plus our January, February, and May through November 2013 issues for further details). Or maybe I could have "officially" made it the 11th chapter, by calling it *Mother-in-law of "Why So Big?"* or something like that. (Here's a wacky thought: I wonder what the movie *Mother-in-law of Frankenstein* might have been like? Furthermore, how would they have advertised it? Maybe "*Two* Classic Monsters For

The Price Of One"). Ultimately, however, I decided on a similar but **not** identical title instead. (And, by the way, the short answer to our title is "Yes").

The questions I'll be trying to answer in this article are mostly the same as before: "What is making our newsletter PDF files so big?" and "What are the size differences between supposedly identical PDF files made by Scribus versions 1.3.3.13 and 1.4.0?" I ended *Thanks For "Why So Big?"* (the tenth and last article of the original series) with the following conclusion: **"It now seems pretty obvious that the answer to the question "Why So Big?" is: 51%**

because I was so foolish as to do my work on a Vista computer, and 49% because I did <u>NOT</u> use only JPG images".

Since the Vista laptop computer mentioned above died a seemingly permanent death in January of 20<u>13</u>, we'll be working totally under Linux. Thus, we *won't* be concerned about the first part of that conclusion here; but we *will* be re-examining the second part. In my original experiments, using various image file types for Scribus 1.3.3.13 *didn't* seem to make a difference in output PDF size; but for Scribus 1.4.0, it *did*. Using *non*-JPG files *always* seemed to produce *bigger* 1.4.0 results.

Because the final newsletter studied by the *"Why So Big?" saga* was our September 2013 issue, I'm going to start with the October 2013 issue and work my way through to the ***December 20<u>14</u>*** issue. I adopted my current ***JPG only*** image policy starting with our May 2013 issue. Therefore, ***all*** of the "twin" PDF files produced by Scribus 1.3.3.13 and 1.4.0 from October 2013 onward ***should*** be very close to equal in size; but that's "in theory". Let's see what we get

(Continued Above Right)

"in practice"; but first, some recap:

In our December 2012 issue, near the beginning of the first *Why So Big?* article, I described the ten "practice" newsletters that I created for the club (before I became full-time Editor in January of 2012). Repeating their names and PDF file sizes, they were:

End-of-June 2008 Supplement (06/08): 245.5 KB
End-of-Year 2008 Supplement (12/08): **4.3 MB**
July 2009: 1.8 MB
August 2009: 2.3 MB
July 2010: **6.2 MB**
Rejected First Version of August 2010: 84.7 KB
August 2010: 2.0 MB
July 2011: **3.5 MB**
August 2011: 2.9 MB
October/December 2011 Supplement (Also known as October 2011 Special Security Edition): 765.4 KB

End-of-June 2008 Supplement was originally sent out as a "plain vanilla" e-mail. A slightly more elaborate PDF version was later created "for the archives", and can be found in the ***July*** 2008 slot in

(Continued Below Left)

the grid on the Newsletter page of our club website. (There really wasn't anyplace else to put it). As you might expect, the July 2009, August 2009, July 2010, August 2010, July 2011 and August 2011 issues can be found in their appropriate grid slots. October/December 2011 Supplement is ***not*** on the grid, but a special link to it can be found ***below*** that grid. (End-of-Year 2008 Supplement and Rejected First Version of August 2010 can ***only*** be found on our Newsletter Collection CDs).

According to my target maximum PDF file size of ***3 MB*** (also set in the first Why *So Big?* article), End-of-Year 2008 Supplement (which contained 22 images), July 2010 (which contained 16 images), and July 2011 (which contained 7 images) would be counted as "Too Big". (If you think you've detected a trend here, you're probably right). However, there has to be a point beyond which errors become "set in stone". I've decided (at least for now) that our Newsletter Collection CDs will be that point. In other words, if it's on one of our CDs, it's accepted, warts and all. Therefore, ***all ten*** of those practice

newsletters are now untouchable.

Likewise, the first three issues that I produced as full-time Editor (January through March of 2012) are also untouchable. Happily for me, all three of them measured 1.8 MB. Thus, they are ***not*** "Too Big"; and because we ***didn't*** produce a CD after March of 20<u>12</u>, oversize newsletter PDF files from April 2012 upward ***can*** still be "fixed". They are: August 2012 (3.3 MB), October 2012 (4.1 MB), November 2012 (3.2 MB), July 2013 (3.0 MB, right at "the outer limit"), February 2014 (4.2 MB), April 2014 (5.4 MB), May 2014 (5.0 MB), September 2014 (3.2 MB) and October 2014 (4.7 MB). That October 2014 issue has ***already*** received some early experiments in size reduction. (Its initial size was ***6.1*** MB). Maybe, once we learn more, we can do even better. So let's collect more data.

For starters, we'll go to the OCTDEC13 directory. While located in that directory, our October newsletter's working name was 2013Oct1.pdf. (For good and sufficient reasons that I ***won't*** go into now, it wasn't given its official name of 2013-10.pdf until

after it was uploaded to our club website). Its final size was 2.9 MB; but it started out as a ":skeleton" file, so that's where we'll start, too. The "skeleton" work file used for the October 2013 issue was 1309SKL3.sla, measuring 539 KB. This file *already* contained 17 images, *all* JPG: 14 of our "Tiny Computer" images, 1 CD image (from our CD ad), and 2 giant images containing the complete contents of pages 15 and 16. A PDF of 1309SKL3.sla produced by Scribus 1.3.3.13 measured 1.75 MB (actually 1.842.584 bytes), while a PDF produced by 1.4.0 measured 1.76 MB (actually 1.844.433 bytes). That's an increase of only 1,849 bytes. So far, so good.

As mentioned above, the final October PDF produced by 1.3.3.13 (on September 25, 2013) measured 2.9 MB (actually 3,028,583 bytes). Now, I've produced a new PDF using 1.4.0. It measured 2.8 MB (actually 2,986,872 bytes). That's 41,711 bytes *smaller* than the 1.3.3.13 version. Still so far, still so good. Previously, in the *"Why So Big?"* saga, I *de*constructed each newsletter page by page. This

time, I'll be taking a slightly different approach: I'm going to deconstruct each newsletter image by image instead. This way, I can save time by "cheating". Unlike text, Scribus does *not* store copies of its images inside of its work files. What l*ooks* like an internal copy of the image is actually just a pointer (or link, if you prefer) to that file, still stored separately on the hard disk.

So I'll create a new, empty directory, and put a copy of the October 2013 work file (2013Oct1.sla) in it. I'll also add copies of each image from that issue. Then, to delete an image, I don't actually have to edit the work file in any way. All I have to do is delete the copy of that file from my new directory. That's because I always set Scribus to look for images *only* in its *current* directory. Therefore, when I tell Scribus to create a new PDF file, it won't be able to find that image, and thus won't include it in its PDF. Sneaky, huh?

But first, I decided to cheat even more. I put a copy of my "skeleton" file (1309SKL3.sla from above) in my new, empty directory, and then I produced both

---

(Continued Above Right)   *(Continued Below Left)*

1.3.3.13 and 1.4.0 PDFs there. As planned, neither Scribus version was able to find any of the 17 images mentioned above. So I got two *completely* image free output PDF files. The 1.3.3.13 PDF measured 777.4 KB (796,065 bytes), while the 1.4.0 PDF measured 779.0 KB (797,708 bytes). An increase of only 1,643 bytes. (Even more still so far, still so good). Because most of page 1 in the "skeleton" file was empty, and *all* of pages 3 through 12 contained *no* text either, these results should be *smaller* than any other PDF file that we produce here. Therefore, for verification purposes, we've got a *lower limit*. (Note that this new lower limit is, in fact, *bigger* than most of the finished newsletter PDF files produced by Barbara DeGroot during her amazing term as Editor, from 1995 through the end of 2011).

Author's Note: I started writing this article around January of 2014. That's when I wrote most of the text above. (Though I'll admit that I've updated some of it just now). From the beginning, I intended it to be a two-parter, because I strongly suspected that it

would take a *long* time to produce. My plan was that Part 1 (tentatively scheduled for our July 2014 newsletter) would examine our October 2013 through June 2014 issues, and Part 2 (tentatively scheduled for our January 20**15** newsletter) would examine our July 2014 through December 2014 issues. Now, I'm writing this in early *October* of 20**14**, so you can see that things *didn't* go the way I'd planned. In fact, I had to put this article "on the shelf" for quite a while, while I concentrated on other problems.

Now, I'm picking it up again; and, because I'm basically a lazy bum, I salvaged as much of the previously written material as I could. So, on to new stuff: First, I've made a few changes to my plan of operation. Instead of copying my work files into an empty directory, I made *two* complete copies of my OCTDEC13 directory, which I named OCTDEC13-temp3 and OCTDEC13-temp4. The temp3 directory is for Scribus 1.3.3.13, and temp4 is for Scribus 1.4.**2.** That's the newer version that was installed by default on my evaluation installation of Lubuntu

14.04 LTS, which I'll be using *instead* of Ubuntu 12.04 LTS for the next two months, as part of my ongoing Distros Revisited project. (See *Distros Revisited (Part 6)* in our November 2014 issue for further details).

In this way, I can work on the October, November and December 2013 issues without having to copy anything anywhere else. Plus, I can modify or delete anything I want without worrying about messing up the original material. That's because that original material remains untouched; and *all* of my temporary directory copies (and there'll be more later) *will* be wiped out when I've finished this article. So it doesn't matter what happens to them beforehand. How's that for laziness? (Oops. I mean efficiency). So let's get going!

Remember from above that the October PDF produced by Scribus 1.3.3.13 measured 2.9 MB (actually 3,028,583 bytes), and the PDF produced by Scribus 1.4.0 measured 2.8 MB (actually 2,986,872 bytes, making it *smaller* by 41,711 bytes). Now, Scribus 1.4.2 made a PDF also measuring 2.8 MB

(actually 2,987,024 bytes). That's 152 bytes *bigger* than 1.4.0 but still 41,559 bytes *smaller* than 1.3.3.13. Certainly a consistent and acceptable result. Now, at last, we're *really* headed into new territory. Since this article is concerned with images, I made a list of the 23 images that were used in our October, November and/or December 2013 newsletters, in size order. (*NOT* alphabetical order). However, I *won't* be reproducing it here. Instead, I'm going to break it down in several ways:

First, here are the 6 files that were used in *all three* issues. (For later reference, we'll call this List A):
PC-SeeYa.jpg (6,387 bytes)
TINY_PC2.jpg (15,068 bytes)
PC-3line.jpg (39,444 bytes)
NL_CD_12.jpg (259,856 bytes)
1108page15-150.jpg (309,947 bytes)
1108page16-150.jpg (460,648 bytes)

Second, here is the only file used in both the October and November issues. (Technically, having only one entry, this *isn't* a list; but we'll call it List O+N anyway):

(Continued Above Right)

(Continued Below Left)

PC-4line.jpg (42,452 bytes)

Third, here is the only file used in both the October and December issues. (We'll call this List O+D):
ACGNJ4R.JPG ((105,848 bytes)

Fourth, here are the 9 files used *only* in the October issue:
MoonWitch1.jpg (1,310 bytes)
MoonWitch2.jpg (2,941 bytes)
Goodnight iPad.jpg (21,387 bytes)
GetSmar1.jpg (27,756 bytes)
acgnj2-G.jpg (28,128 bytes)
GetSmar2.jpg (31,828 bytes)
SS9612-G.jpg (45,320 bytes)
TShirtF2.JPG (178,733 bytes)
TShirtR2.JPG (185,528 bytes)

Well, that takes care of October. (A total of 17 files). For November, we'll need the 6 files from List A, plus the 1 and only file from List O+N. Then, we'll need the following 2 files used in both November and December (which we'll call List N+D):
TShirtR4.JPG (98,028 bytes)
TShirtF4.JPG (172,544 bytes)

Last, we'll wrap up with the single file used *only* in the November issue (for a total of 10 files):
ACGNJ3RC.JPG (137,565 bytes)

Finally, for December, we'll need List A, List O+D, and List N+D. Plus the following 3 files used *only* in December (for a total of 12 files):
Webof1.jpg (11,708 bytes)
Webof2.jpg (21,194 bytes)
cdr1.jpg (26,669 bytes)

OK. That brings us up to date and lays out my plans; but we've also got a problem: We're approaching 2,200 words, and we haven't really *done* anything yet. So I'm going to have to cut back on my usually wordy descriptions. To that end, I'm only going to describe my Scribus 1.4.2 results. Unless I say otherwise, you'll just have to assume that my Scribus 1.3.3.13 results came out "close enough". So let's proceed:

There are actually two images in this issue that are smaller than PC-SeeYa.jpg (6,387 bytes); but it's the first file on List A, so we'll delete it first. (This is the image file for the "tag line" that I put at the end of

my own monthly "tech" articles). I deleted that file and then made a new PDF, and it came out 6,665 bytes smaller. (Just 278 bytes smaller than the deleted file). Could this difference be due to "overhead"?

Likewise, there are four images smaller than TINY_PC2.jpg (15,068 bytes); but it's the second file on List A, so I deleted it second. (This is the image file for the "Tiny Computer" image that we use to mark the end of most newsletter items. It's repeated a total of *18 times* throughout this particular issue). Again, I deleted it and then made a new PDF, which came out 15,475 bytes smaller. (Just 407 bytes smaller than the deleted file). From previous experience, I expected that the decrease in PDF size would be about equal in size to *one* copy of the source file. So I guess that the 407 byte difference also comes from "overhead".

Next was PC-3line.jpg (39,444 bytes), the three line version of the "rights" notice that we attach to the end of the "foreign import" articles that we publish. This time, my PDF came out 39,715 bytes smaller.

(A difference of 271 bytes). More "overhead"? After that, I deleted NL_CD_12.jpg (259,856 bytes), the image from our Newsletter CD ad. Its PDF came out 260,142 bytes smaller. (A difference of 286 bytes). From now on, unless something really unusual happens, I won't bother mentioning "overhead" any more.

Now we come to two "biggies". 1108page15-150.jpg (309,947 bytes) is an image of the complete contents of page 15 from the November 200**8** newsletter. Its PDF came out 310,223 bytes smaller. (A difference of 276 bytes). Similarly, 1108page16-150.jpg (460,648 bytes) is an image of the complete contents of page 16 from the November 200**8** newsletter. Its PDF came out 460,929 bytes smaller. (A difference of 281 bytes). OK. That finishes up List A.

PC-4line.jpg (42,452 bytes) is the only file on List O+N. It's the *four* line version of the "rights" notice that we attach to the end of the "foreign import" articles that we publish. Its PDF came out 42,727 bytes smaller. (A difference of 275 bytes). ACGNJ4R.JPG ((105,848 bytes) is the only file on

----
(Continued Above Right)   *(Continued Below Left)*

List O+D. It's the ACGNJ logo that we use on Page 1 in most "even" months. Its PDF came out 106,132 bytes smaller. (A difference of 284 bytes)

At last, we come to the 9 files used *only* in the October 2013 issue. (I've changed the order of these files slightly. When we get to the end, my reason will become obvious). MoonWitch1.jpg (1,310 bytes) is the smallest file used in this issue. It's the 1991 Full Moon Witch that I created for the October 19**91** newsletter that I published for the Bayonne Train Club all those years ago. (I was very proud of her then, and I'm *still* proud of her now). After I deleted her, my next PDF came out 1,573 bytes smaller. (A difference of 263 bytes).

MoonWitch2.jpg (2,941 bytes) is the 1992 Full Moon Witch that I created for the October 19**92** Bayonne Train Club newsletter. After I deleted this second witch, my next PDF came out 3,238 bytes smaller. (A difference of 297 bytes). Note that, despite the presence of the word "Moon" in both of their names, there has *absolutely, positively never* been *any* trace of a moon in either of these images.

(For an explanation, please see my article *Green Cheese???* in our January 2014 issue).

SS9612-G.jpg (45,320 bytes) and acgnj2-G.jpg (28,128 bytes) are ACGNJ logo images used in the article *ACGNJ Logo History* by John Raff. After I deleted the first file, my next PDF came out 45,606 bytes smaller. (A difference of 286 bytes). After I deleted the second file, my next PDF came out 28,399 bytes smaller. (A difference of 271 bytes).

Ever since I discovered that the club had T-shirts for sale (maybe as much as *ten* years ago), I've thought that we should do more to advertise them. Since I became Newsletter Committee Chairman in 2009, I've wanted to put a T-shirt ad in our newsletter. Finally, in the October 2013 issue, I actually did it. TShirtF2.JPG (178,733 bytes) and TShirtR2.JPG (185,528 bytes) are the illustrations that I made for that first ad.

After I deleted the first file, my new PDF came out 179,007 bytes smaller. (A difference of 274 bytes). After I deleted the second file, my new PDF came out 185,824 bytes smaller. (A difference of 296

bytes). Because I modified both illustrations almost immediately afterwards, this was the *only* issue in which either of those two images appeared.

GetSmar1.jpg (27,756 bytes) and GetSmar2.jpg (31,828 bytes) are the images that came with *GET SMART!* by Bob Woods. (One of our "foreign import" articles). After I deleted the first file, my new PDF came out 28,029 bytes smaller. (A difference of 273 bytes). After I deleted the second file, my new PDF came out 32,117 bytes smaller. (A difference of 289 bytes).

Goodnight iPad.jpg (21,387 bytes) is the image that came with *Review: Goodnight iPad* by Judy Taylour. (Another "foreign import" article). After I deleted it, my new PDF came out 189,141 bytes smaller. (A difference of *167,754 bytes*). Immediately, I re-processed those last 9 files several times. I deleted them in a different order each time; and my results always came out *exactly* the same. So this incredibly anomalous difference *must* be accepted as accurate. Aarrgh!!!

Just when things were going so well, too. Except for this file, all of my differences were between 263 and 297 bytes. (Except for that one 407 byte difference,

easily explained as a reasonable increase in "overhead", because that one image has to be displayed a total of *eighteen* times in different parts of our output PDF file). Now you can see why I chose to reproduce this particular order of deletion here. It gives us a *really* dramatic climax. Because this result, if allowed to stand, pretty much ruins the whole point of this article.

Here are the only Scribus 1.3.3.13 results that need concern us: Deleting TINY_PC2.jpg (15,068 bytes) produced a new PDF that came out 15,422 bytes smaller. (For a 354 bytes difference this time. *Even less* than the 407 bytes realized by 1.4.2). Deleting Goodnight iPad.jpg (21,387 bytes) yielded a PDF file 189,393 bytes smaller. (For a difference of *168,006 bytes*. Just slightly *more* than the enormous 167,754 byte difference realized by 1.4.2). I'll say it again: Aarrgh!!!

Unfortunately for me, we've gone past 3,400 words, so I have to stop writing now. Therefore, we'll have to wait for answers until *Part 2* (which, due to a scheduling conflict, *can't* be published next month). I don't like to end an article on a "downer", but this time I don't have any choice. See you next month. 🖳

Image Processing Software, Part 2
Dick Maybach, Member, Brookdale Computer Users' Group, NJ
Newsletter: BUG Bytes (www.bcug.com) n2nd (at) att.net
(See our October 2014 issue for Part 1)

In the first article, we discussed photo retouching using GIMP (GNU Image Manipulation Program). However, GIMP does not develop raw files; for that you need a program such as RawTherapee. Why would you want to bother with this extra step? In the picture inside a church, the frame on the left is the JPEG image as produced by my camera, while the
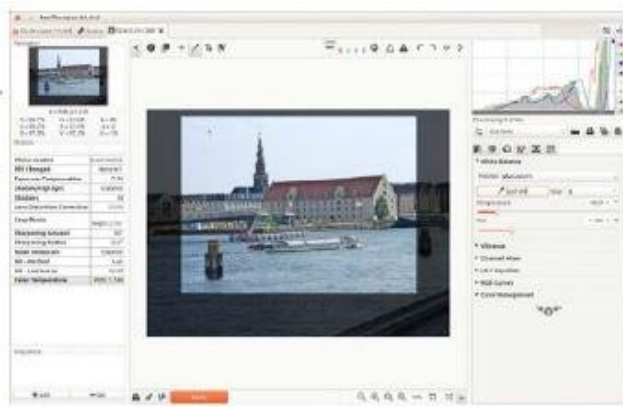

one on the right is the same image, but I used RawTherapee to process it from a raw file. (I have my camera set up to save every picture as both a JPEG and a raw image and decide what processing to use after I see the results.) This example shows one advantage of working with a raw images. In the JPEG, the roof is essentially black with no visible detail, while in the processed raw image, the details are visible. This is not a simple exposure compensation, as you can see by noting that the highlights in the two images (for example as seen through the open door on the right) have about the same brightness. While adjusting the brightness, I also compensated for the perspective distortion resulting from the wide-angle lens. As a result, the image on the right is much closer to what your eye would see. (The changes here are modest, in an attempt to keep the result realistic. You can easily go

off the rails and produce results that belong in a comic strip.) The improvement is possible because the camera records 12 bits per pixel per color, while a JPEG image has only 8. In other words, the raw image has 16 times the dynamic range of the JPEG one. In photo terms, this means that the raw image has two to three more f-stops of range that a corresponding JPEG.

The screen-shot below shows an image being processed by RawTherapee (*http://rawtherapee.com/* for Linux, OS X, and Windows). The panel on the

. The RawTherapee graphical user interface in Ubuntu Linux.

(Continued Above Right)

right shows the tools available, and these are grouped with tabs. The color adjustment tab has been selected and the white balance tool within it. From left to right the tabs are exposure, detail, color, transform, raw processing, and metadata. Histograms for luminance, and the three primary colors are visible at the top of this panel. The left panel shows the history of the changes, and the center one the current state of the image. If you look carefully, you will see a button on the bottom, just to the left of the orange "Ready" button. Clicking this develops the image and sends it to GIMP as a 16-bit TIFF file. (As I noted in the previous article, the current version of GIMP is capable of only 8-bit processing, so it immediately converts the file to 8-bit TIFF. Hopefully, this butchering will stop with the next version of GIMP.) The next button to the left outputs a JPEG, TIFF, or PNG file directly. I frequently skip GIMP altogether as RawTherapee can often do all the processing I need. RawTherapee is a non-destructive editor; that is, it makes no changes to the image file. Instead, it creates a separate script file that specifies the processing to be

(Continued Below Left)

done when the raw image is developed. The processing occurs in the order the program deems optimal. As a result, the order in which you perform your editing is unimportant. This is much different than with a program such as GIMP, which changes the image directly in sync with what you do. In the latter case, the order of the editing steps is quite important. RawTherapee requires some persistence to master, partly because it has no help file. Expect to spend some time reading the manual and searching the Web for examples before you become comfortable with it. Finally, although it should run on a 32-bit operating system without difficulty, a 64-bit one is recommended.

RawTherapee has a unique ability to correct for lens distortion. When your camera saves an image in raw format, the file includes a JPEG thumbnail in which the lens distortion has been corrected (providing that if your camera has a removable lens, it's compatible with the camera). The program uses the thumbnail to correct any distortion in the raw image. All other programs that incorporate automatic distortion

correction, including Photoshop, use databases, and these don't cover all combinations of cameras and lenses. Indeed, RawTherapee can use the same Adobe camera and lens profiles used by Photoshop, but it is a non-trivial process to adapt them.

Lightzone (*http://www.lightzoneproject.org/* for Linux, OS X, and Windows) is a raw developer with a much different approach. For one, you can specify only a portion of the image for a particular processing step, while RawTherapee always works on the entire image. It can also show you which portions of the image have similar luminosities, which is frequently helpful. The screen-shot below shows an image being edited in LightZone. In the right-hand panel, the icons below the thumbnail bring up windows, a new one each time you click on an icon. Each window is one application of an editing tool, which can apply to the whole image or just a portion. If you delete a window, the changes you made using that step are also discarded. When you develop the image, the processing is done in the same order as the tool windows, so unlike

The LightZone graphical user interface in Ubuntu Linux.

RawTherapee, their order can be important. You can reorder the processing by drag-and-drop moving of the tool windows. You can also change the way in which the effects of each tool are combined in the final image. The left-hand panel shows the editing history. Here, I've adjusted the white balance, applied the relight tool (which lightened the shadows and darkened the highlights) and further lightened the shadows. Then I used the color selector to select the very bright areas (the window and the sun-lit highlights on the table) and reduced the luminosity

of only those regions. Finally, I rotated the image. All this takes longer to describe than to do. The screen-shot shows a region selected based on its luminosity, but I could have based it on color, or just by drawing an outline.

Like RAWTherapee, LightZone has several pre-defined styles, and often applying one of these is the only thing you need do to obtain a satisfactory result. Unlike RawTherapee and UFRaw, LightZone has no provisions for correcting distortions. (If you look carefully at the window frame and the bookcase, you can see some curvature, which results from my particular lens, a wide-range zoom. Better lenses have less distortion and some cameras correct for it in their raw images.)

To get the best results from LightZone you must start from a raw image, as JPEG has discarded much of the photo's dynamic range. Since the program can't correct lens distortion, you would pass the developed image file to GIMP in TIFF format (to avoid degrading it with JPEG compression). There, you would correct he image in GIMP, perhaps by

---
(Continued Above Right)

(Continued Below Left)
---

comparing it to a JPEG version of a photo as processed by your camera.

The combination of GIMP, RawTherapee, and LightZone will provide the tools to do almost all your image processing. I've introduced these because they have good reputations and I'm familiar with them. However, an Internet search using "image processing software" will reveal dozens of alternatives, both free and commercial.

References

Montabone: Beginning Digital Image processing Using Free Tools for Photographers – provides a good overview of the tools I've discussed, although the book is less helpful than it could be as all the example images are in black and white.

http://www.cambridgeincolour.com/ – contains many very valuable tutorials on photography and image processing. If you check only one photo Web site, this should be the one.

Make a search for "RawTherapee 4 User Manual" to find a very good manual (hosted on Google Books). This is essential as the program has no help feature.

http://sunburntandinneedofashave.blogspot.com/2010/03/lightzone-beginners-tutorial-well-sort.html will get you started with LightZone, although the program does have very good help features.

This article has been obtained with permission to reprint by non-profit or other user groups, with credit given to the author, the publication and the user group.

Music and Video Files: Modify Them to Your Needs
Phil Sorrentino, Staff Writer, The Computer Club, Inc., Sun City Center, FL
Newsletter: The Journal (www.scccomputerclub.org) philsorr (at) yahoo.com

Music and Video files that you produce with your video camera, or voice recorder, are not always exactly what you want. Now, I'm not suggesting that

you can change the artistic quality of the file, but that you can change the file length or size to accommodate your particular needs. With either an

audio or a video file, the particular file may be too long, or it may contain sections that are not needed. So, it would be nice to be able to cut off the beginning, the end, or remove a slice somewhere in between. I'm sure there are many other ways to accomplish these tasks, but I have found that Windows Movie Maker (to modify video files) and Audacity (to modify audio or music files) are good choices, and both of these software applications are free. Windows Movie Maker is provided by Microsoft and can be downloaded at: *www.windows.microsoft.com/en-us/windows/get-movie-maker-download*, and Audacity is provided by Sourceforge and can be downloaded at: *www.sourceforge.net/download*.

A multi-media presentation, or "movie" as Movie Maker (and many other commercial packages) calls it, is a collection of pictures, videos, and music, organized as a movie, used to tell a story. It may be the story of your latest vacation, your last birthday, the last big holiday, your youngest grandchild, or a pictorial history of someone, something, or some

(Continued Above Right)

be imported and shown as a series of Video blocks. Now you can play your video clip using the Play and Pause buttons, and identify the pieces to be removed. Select "Edit," under Video Tools, and you will see the "Split" tool. Move the Movie Cursor (the dark vertical bar) to the first point where you would like to split the video. If you are going to remove the beginning, move to the point where you would like the video to begin. Click the Split tool. This will create two videos, one before the split and one after the split. Right click the video piece to be removed and select "Remove." This will delete that piece of the video. Now you can move through the video and identify pieces to remove and pieces to keep. Just move the Cursor to the locations to split the video and use the Split tool. Then Remove the unwanted pieces and save the good piece as a new video with a new name. Usually you will find pieces to keep and pieces to remove interspersed. If you want to save many pieces, you will probably have to find a piece to save and delete everything else, and then start over with the original video and isolate the next piece and delete everything else. So it may be very

organization. If you have appropriate pictures, videos, and music, Movie Maker can easily put them together to create a movie to express your particular point of view. So, obtaining the pictures, videos and music is usually the first step in producing your movie. Pictures are probably the easiest; you just review the pictures, improve their quality if needed, and then put them is an appropriate sequence. Videos are a little more difficult because they usually need to be shortened, and possibly have inappropriate sections removed. Music, or audio, is easy if you have good recordings, but sometimes you may want to remove certain portions, like bad scratches or pops, or a long lead-in or long lead-out. Or you might only want a few words out of a lengthy oration.

Movie Maker can be used as a tool for modifying video clips. (Once the video clips are the way you want, you can then add them to your movie.) After opening Movie Maker, click "add videos and photos", and navigate to the video clip that you want to modify. Select the video clip and it will be added as the only item in your movie. The video clip will

(Continued Below Left)

tedious if you want to save a lot of small pieces from one larger video, but it will surely be worth the time and effort. Once you have video pieces, you can join them by starting with a "File-New" movie and adding the video pieces using "add videos and photos." Put them in the proper sequence and add a "transition" in between so they will flow smoothly, then save it as a new video.

Audacity is an Audio Editor and Recorder. Audacity is very comprehensive and can do many things. One of those things is that it can be used as a tool for modifying audio (sound or music) files. After opening Audacity, click File-Open and navigate to the audio clip that you want to modify. The audio clip will be imported and shown as a graph of the amplitude of the audio. (Both Left and Right channels will be displayed if the audio is in stereo). Now you can Play your clip using the Play and Pause buttons and identify the pieces to be removed. No, or very low, volume periods will be indicated by just a horizontal line with no amplitude. The Audio Cursor can be placed on the recording by Right-clicking on a point in the recording. A section of the

recording can be selected by pressing the Right Mouse button while on the recording, and dragging the Mouse to the end of the area to be selected. Then using the File-Export Selection, the selected section can be saved as a new audio file with a new name. I found this tool very helpful in separating multiple cuts from an audio recording of a complete side of a vinyl recording (a record album for those of us over 40). I had converted my old vinyl recordings to .mp3 files, just before giving them away. To save time I converted the recordings a side at a time. So for each vinyl album I ended up with two .mp3 files, each about 20 to 25 minutes, and each having 12 to 16 cuts (songs) in each .mp3 file. So, the individual

songs were separated by about 2 seconds of silence (no amplitude), making them easy to identify, once you have listened to the cut using Audacity.

As you can see from these basic directions for modifying a video file with Movie Maker and an audio file with Audacity, the process is very similar, even though the displays look very different and the displayed file representations look very different. The results are very similar too; it's a modified file that will be useful in your next Movie Making project.

This article was obtained with permission to reprint by non-profit or other user groups, with credit given to the author, the publication and the user group.

Book Review: Galaxy S4 - The Missing Manual
(The book that should have come with the site).
Steve Costello, President / Editor, Boca Raton Computer Society, FL
Newsletter: Boca Bits (http://brcs.org/) editor (at) brcs.org

I have read several of the Missing Manual series of books and find them very informative.

Previous Missing Manual Reviews:

January 2013 - Wordpress: The Missing Manual

http://ctublog.sefcug.com/wordpress-the-missing-manual-by-matthew-macdonald/

April 2012 - Google+: The Missing Manual

http://sefccw.wordpress.com/2012/04/02/book-review-google-the-missing-manual-by-kevin-purdy/

Disclosure:

I received this through the O'Reilly User Group Program at no cost, and decided to review it, as I have a Sprint Galaxy S4 and want to get the most out of it.

Review:

The book is divided into five parts:

Part I - The Basics

If you've had your S4 for a while, you should at least skim this part to make sure you are aware of these basics.

Part II - The Built-In Features

This part deals with taking pictures/videos, music management, GPS, the calendar, and more.

Part III - The Galaxy S4 Online

Learn about networks, hotspots, email, getting apps, etc. with your S4.

Part IV - Advanced Features

How to synch/transfer files, virtual private networking (VPN), voice control, settings list, different connections/accounts, and more.

Part V - Appendixes

Setup and sign up, accessories, troubleshooting and maintenance.

NOTES

Note 1: "This book happens to be written based on the Samsung Galaxy S4 sold for T-Mobile phones, so it may slightly differ from what you see on phones from other carriers." Quoted from the Frequently Asked Question box on page 27.

Note 2: My S4 is for Sprint, but for the most part things are the same. There are some different default apps of course.

Conclusion:

Well worth the investment of time and money to get the most out of your Samsung Galaxy S4.

Author: Preston Gralla

Publisher: O'Reilly Media

Released: August 2013

Price: Ebook $15.99, Print $19.99

http://shop.oreilly.com/product/0636920022824.do

This article was obtained with permission to reprint by non-profit or other user groups, with credit given to the author, the publication and the user group.

SIG News

LUNICS (Linux/Unix)
Andreas Meyer (lunics@acgnj.org)
http://www.acgnj.org/groups/lunics.html

LUNICS is a group for those who share an interest in Unix and similar operating systems. While we do quite a bit with Linux, we've also been known to discuss Solaris and BSD as well. Recent meetings have followed a Random Access format. See our web page for further information. (We meet on the first Monday of each month, at 8:00 PM). ▱

Main Meeting
Evan Williams (president@acgnj.org)
http://www.acgnj.org/groups/mainmeet.html

We meet on the first Friday of the month, at 8:00 PM. Each December, this meeting includes our Annual Business Meeting and Officer Elections. *No* meetings in July or August. ▱

Layman's Forum
Matt Skoda (som359@gmail.com)
http://www.acgnj.org/groups/laymans.html

This SIG discusses issues of interest to novice users or those planning to get started in computing. Watch our Web page for updates and announcements. We meet at the same time as the Hardware Workshop. (On the second Monday of the month, at 8:00 PM). *No* meetings in July and August. ▱

Hardware Workshop
Mike Reagan (hardware@acgnj.org)

This group is dedicated to repairing, refurbishing and/or recycling older computers. Ten people attended the first meeting, so there is still a market for this type of event. Although we looked at some of the older equipment stored in he back room, most of our time was spent in talking about ast experiences and planning for the future. Hopefully, we can establish a viable long-term schedule of projects, and keep the interest of those who attended this inaugural meeting. If you have a hardware problem, bring it in and we can all help fix or demolish it. (No guarantees either way.) We meet at the same time as the Layman's Forum. (On the second Monday of each month, at 8:00 PM). ▱

Java
Mike Redlich (mike@redlich.net)
http://www.redlich.net/javasig/javasig.html

This SIG covers beginner, intermediate, and advanced level Java programming. Primary focus is on developing useful/practical applets and applications. (We meet on the second Tuesday of each month, at 7:30 PM). ▱

Mobile Devices
Brenda Bell (mobdevsig@acgnj.org)

The Mobile Devices SIG focuses largely on current-generation cellphones and smart phones (such as Blackberry, Android, iPhone) which bridge the gap between basic cell phones and traditional computers, and how they can help you manage and organize your life. Our membership ranges from those who have recently acquired their first, basic cellphone to those who develop applications for today's modern smart phones, iPods, and ultra-portable computers. While we expect to spend much of our time investigating the built-in features and specialized applications available to modern smart phones, if you bring your basic (or multimedia) cell phone, iPod, or other mobile device with questions on how to use it, where to find applications, or what features they have, we are always happy to help! Meet and greet and plan where this event goes. Bring all your ideas, PDAs, fancy phones, etc. (We meet on the second Wednesday of alternate months (we get the even ones), at 7:30PM). ▱

WebDev
Evan Williams (webdev@acgnj.org)

This SIG is an open forum for all Website Development techniques and technologies, to encourage study and development of web sites of all kinds. All languages will be considered and examined. The current project is a CMS for the club. Anyone interested in starting a new project, come to the meeting and announce/explain. Provide as much detail as possible. WebDev should be an all-encompassing development and examination forum for all issues, applications, OS, languages and systems one can use to build Websites. We currently

have two web development language SIGs: .NET and Java; but other languages and OS need to be investigated, examined and tested; Windows, Linux, UNIX, DEC, Vax, HP etc. Intel-PC, Motorola - MAC etc. (We meet on the second Wednesday of alternate months (we get the odd ones), at 7:30 PM).

Investment Software
Jim Cooper (jim@thecoopers.org)
http://www.acgnj.org/groups/sig_investment.html

The Investment SIG continues with presentations on how to use analysis programs TC2000 and TCNet. Large charts are presented on our pull down screen and illustrate the application of computer scans and formulas to find stocks for profitable investments. Technical analysis determines buy points, sell points and projected moves. Technical analysis can also be used on fundamentals such as earnings, sales growth, etc. We're no longer focusing on just Telechart. If you are using (or interested in) Tradestation, eSignal, VectorVest, or just in learning how to select and use charting and technical analysis, come join us!! (We meet on the second Thursday of the month, at 8 PM).

NJ Gamers
Gregg McCarthy (greggmajestic@gmail.com)
http://www.NJGamers.com
www.lanparty.com

The Friday Night Frag starts at 6:00 PM on the second Friday of each month, and keeps going until 12 Noon on Saturday - 18 hours for 5 bucks!
BYOC - Bring your own computer.
BYOF - Bring your own food.
And if you don't like sitting on metal folding chairs... BYO chair!

Web Browser (Formerly **Firefox**)
David McRitchie (firefox@acgnj.org).

This SIG is an open forum for all Firefox and Mozilla techniques and technologies, to encourage study and development of web sites of all kinds. All browsers will be considered and examined. All members and guests are invited to check out the design concepts and voice their opinion. (We meet on the third Monday of each month, at 7:30 PM).

C/C++ Programming
Bruce Arnold (barnold@ieee.org)
http://acgnj.barnold.us/index.html

This is a forum for discussion of programming in general, beginning and intermediate level C, C++, C-Win programming, hardware, algorithms, and operating systems. We demonstrate real programming in a non-intimidating way, presenting complete code for working programs in 3-5 sheets of paper. (We meet on the third Tuesday of each month, at 7:30 PM). *No* meetings in July or August.
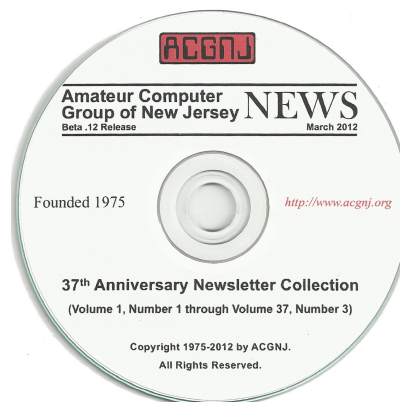
Window Pains
John Raff (jraff@comcast.net)
http://www.acgnj.org/groups/winpains.html

Intended to provide members with Windows oriented discussions, Microsoft and Linux style. Directed to more technological level of attendee, but newbies are welcomed. (We meet on the third Friday of the month at 8:00 PM). *No* meetings in July or August.

37th Anniversary Newsletter CD Now On Sale

Beta .12 Release.

$8.00, including postage.

($7.00 if you pick up a copy at a meeting).

Get yours today!

Back Issues *Still* Needed

Our collection remains incomplete. Below is a list of missing newsletters. Anyone who lends us one of these (or supplies a good clear copy) will receive the next CD as our thanks.

1975: #2 and #3 (dates uncertain).
1976: January.
1984: August.
1985: June, July, August, September.

Guru Corner

If you need help with any of the technologies listed below, you can call on the person listed. Please be considerate and call before 10 PM.

Software

HTML	Mike Redlich	908-246-0410
	Jo-Anne Head	908-769-7385
ColdFusion	Jo-Anne Head	908-769-7385
CSS	Frank Warren	908-756-1681
	Jo-Anne Head	908-769-7385
Java	Mike Redlich	908-246-0410
C++	Bruce Arnold	908-735-7898
	Mike Redlich	908-246-0410
ASP	Mike Redlich	908-246-0410
Perl	John Raff	973-560-9070
	Frank Warren	908-756-1681
XML	Mike Redlich	908-246-0410
Genealogy	Frank Warren	908-756-1681
Home Automation	Frank Warren	908-756-1681

Operating Systems

Windows 3.1	Ted Martin	732-636-1942

ACGNJ MEMBERSHIP APPLICATION

Sign up online at *http://www.acgnj.org/membership_update.htm* and pay dues with PayPal.

Dues	US/CANADA	STUDENT	SENIOR CITIZEN (Over 65)
1 Year	$25	$20	$20
2 Years	$40		
3 Years	$55		$45

Mail this application and your check to:

   AMATEUR COMPUTER GROUP OF NEW JERSEY, INC., P.0. BOX 135, SCOTCH PLAINS, NJ 07076

❏ New Member   ❏ Renewal   ❏ Address Change

First Name _____ Last Name _____ Phone _____

Mailing Address _____ E-Mail _____

City _____ State _____ Zip _____ URL _____

What topics would you like to see covered at club meetings?_____

Other Local Computer Groups

Princeton Macintosh User Group: 7:15 pm 2nd Tuesday, Jadwin Hall, A-10, Washington Rd, Princeton, (609) 252-1163, *www.pmug-nj.org*	**Linux Users Group in Princeton**: 7 pm, 2nd Wednesday, Lawrence Branch Mercer Library, Rt#1 & Darrah Lane, Lawrence NJ *http://www.lugip.org*	**New York PC**: 3rd Thurs, 7 pm, PS 41, 116 W 11th St. For info call hotline, (212) 533-NYPC, *http://www.nypc.org*
Computer Education Society of Philadelphia: Meetings & Workshops at Jem Electronics, 6622 Castor Ave, Philadelphia PA. *www.cesop.org/*	**Brookdale Computer Users Group**: 7 pm, 3rd Friday, Brookdale Community College, Bldg MAS Rm 100, Lincroft NJ. (732)-739-9633. *www.bcug.com*	**NJ Macintosh User Group**: 8 pm, 3rd Tuesday, Allwood Branch Library, Lyall Rd, Clifton NJ. (201) 893-5274 *http://www.njmug.org*.
PC User Group of So. Jersey: 2nd Mon., 7 pm, Trinity Presb. Church, 499 Rt 70 E, Cherry Hill, NJ. L. Horn, (856) 983-5360	**Hunterdon Computer Club**: 8:30 am, 3rd Sat, Hunterdon Medical Center, Rt 31, Flemington NJ. *www.hunterdoncomputerclub.org*, (908) 995-4042.	**NY Amateur Computer Group**: 2nd Thurs, 7 pm, Rm 806 Silver Bldg, NYU, 32 Waverly Pl, NYC. *http://www.nyacc.org*
Morris Micro Computer Club: 7 pm 2nd Thurs., Morris County Library, Hanover Ave, Morristown NJ, (973) 267-0871. *http://www.morrismicro.com*	**Central Jersey Computer Club**: 8 pm, 4th Friday, Rm 74, Armstrong Hall, College of NJ. Rich Williams, (609) 466-0909.	**NJ PC User Group**: 2nd Thurs, Monroe Rm at Wyckoff Public Library, 7 pm. Maureen Shannon, (201) 853-7432, *www.njpcug.org*
Philadelphia Area Computer Society: 3rd Sat, 12 noon Main Meeting, groups 8 am-3 pm. Upper Moreland Middle School, Hatboro PA. (215) 764-6338. *www.pacsnet.org*	**NJ Computer Club**: 6:15 pm, 2nd Wednesday except Jul & Aug, North Branch Reformed Church, 203 Rt 28, Bridgewater NJ. *http://www.njcc.org*	**Princeton PC Users Group**: 2nd Monday, Lawrenceville Library, Alt Rt 1 & Darrah Lane, Lawrenceville, Paul Kurivchack (908) 218-0778, *http://www.ppcug-nj.org*

Classified

apcug
Member of
The Association of
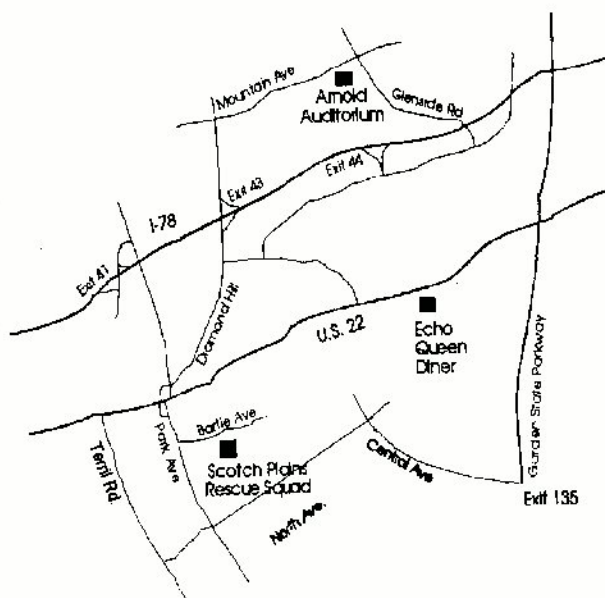Personal Computer User Groups
http://www.apcug.net

Radio and TV Programs

Computer Radio Show, WBAI 99.5 FM, NY, Wed. 8-9 p.m.

Software Review, The Learning Channel, Saturday 10-10:30 p.m.

On Computers, WCTC 1450 AM, New Brunswick, Sunday 1-4 p.m. To ask questions call (800) 677-0874.

PC Talk, Sunday from 8 p.m. to 10 p.m., 1210 AM Philadelphia. 1-800-876-WPEN

Directions to Meetings at Scotch Plains Rescue Squad, 1916 Bartle Ave., Scotch Plains NJ

From New York City or Northern New Jersey

Take Route 1&9 or the Garden State Parkway to US 22 Westbound.

From Southern New Jersey

Take Parkway north to Exit 135 (Clark). Stay on left of ramp, follow circle under Parkway. Bear right to Central Avenue; follow to Westfield and under RR overpass. Left at light to North Avenue; follow to light in Fanwood. Right on Martine (which becomes Park Ave). Right on Bartle Ave in middle of shopping district.Scotch Plains Rescue Squad (2-story brick) is located on the right. Do not park in the row next to the building — you'll be towed.

From I-78 (either direction)

Take exit 41 (Scotch Plains); follow signs to US 22. Turn right at light at bottom of hill and use overpass to cross Rt. 22. Follow US 22 Westbound directions.

From US 22 Westbound

Exit at Park Avenue, Scotch Plains after McDonalds on the right, diagonally opposite Scotchwood Diner on the left, immediately before the overpass. After exiting, turn left at the light and use overpass to cross US 22. Bear right at bottom of ramp to continue south on Park Avenue. Turn left at the second light (a staggered intersection). Scotch Plains Rescue Squad (2-story brick) is on the right. Do not park in the row next to the building — you'll be towed. We meet on the second floor, entering by the door at the right front of the building.

From Western New Jersey

Take US 22 Eastbound to the Park Avenue exit. The exit is about a mile past Terrill Road and immediately past the overpass. Exit onto Park Avenue South and follow the directions above to the Rescue Squad building.